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ABSTRACT

As a collaborative process, action research begins when educational researchers, university faculty, and teachers assist each other in developing the skills to identify and conceptualize problems. The fundamental principle of collaborative research is that the research process is based on a system of discussion, investigation, and analysis in which the researched are as as much a part of the process as the researcher. Teachers, working with researchers in school situations, are in a position to observe and document actual life situations. A proposal is made for the formation of a collaborative action research team, consisting of undergraduate education students, interns, classroom teachers, and university faculty. An exploration of the research potential open to this team is made. (JD)

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Collaborative Action Research:
The Integration of Research and Service

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COLLABORATIVE ACTION RESEARCH: THE INTEGRATION OF RESEARCH AND SERVICE

Gerald J. Pine

THE PROBLEM

While it has always been assumed that educational research and practice should be intimately tied together, research and practice seem to have become alienated from each other. Practitioners seldom conduct research of any kind, but often question the relevance and importance of educational research. In the face of the questions, demands, and problems challenging education, the profession can no longer afford a separation between research and practice. It never could! The reintegration of educational research and practice is essential if any genuine progress is to be achieved in addressing the pressing and important issues in education. Progress by numbers and nomenclature has disenchanted the educational community and the public and has dichotomized research from service.

Educational research has consistently been caught in a fundmental dilemma between the practical or "doing" aspects and scientific or "knowing" aspects of a problem. On one side, are the real, practical demands on the teacher that are specific to the situation. On the other side, are the demands of the scientific; that the knowledge obtained can be shared and used by a community that is larger than those with direct experience of a specific event.

A major problem in integrating research and service is research methodology and design. Because the quantitative methods of the physical sciences have enjoyed the highest academic status, educational researchers "have gone empirical" with a vengeance. Quantitative methodology, as it has percolated down through physical sciences, has become exceedingly popular in educational research, resulting in forced fits between research methodologies and educational problems. The emphasis on quantitative methodologies, particularly experimental design, has limited the selection of research topics to problems that can be addressed by such methods, or, worse, has led us to believe that these methods were sufficient to address any issue that was at hand (Graham, 1979).

However, educators are witnessing a change in the discussion on research methodology in education. A number of scholars assert that the quantitative and experimental research models borrowed from the physical sciences cannot address the major research questions (Graham, 1979; Reid, 1979; Schubert, 1980; Schwab, 1970, 1975; Scriven, 1979). The disparity between the real life problems suggested by the front line work of teachers in the classroom and the awareness that experimental and quantitative research designs no longer work in all cases has raised a number of questions about the appropriateness of traditional experimental research approaches.

The context of Teacher Corps projects illustrates the problem of fit between the experimental method and the improvement of educational

practice. Measuring student learning and gains in terms of academic achievement, and affective growth in relation to the goals and objectives of a specific Teacher Corps project is a paramount concern of any project but particularly a project which focuses on research adaptation. The ultimate objective of Teacher Corps Research Adaptation Cluster projects is to introduce and demonstrate through research adaptation needed innovation and change to increase the effectiveness of education for low income, special needs, and minority group children, ways need to be formed to determine the degree to which this objective is achieved. What happens to student learning when research validated practices, products, and processes are systematically adapted to bring about organizational, curriculum, and behavioral change? Will students change in their perceptions of self and others? What kinds of attitudinal and behavioral changes will occur among students? What is the relationship between Teacher Corps preservice and inservice instruction for teachers and student cognitive and affective growth?

In the past the experimental method often has been used in an attempt to address these kinds of questions. But the experimental method for evaluating student growth and achievement as outcomes of a Teacher Corps project or any innovative program has three major problems. First, the application of the experimental design requires that experimental and control conditions be held constant throughout the length of the experiment. This means that all students and/or their teachers must receive only one treatment consistently; contamination must be

avoided. If data about differences between students and teachers participating in a Teacher Corps program and students and teachers not participating in the program are to be meaningful, treatments cannot be modified while the experiment is in progress. In accepting the rigorous conditions of the experimental method, one is asked to fit the program to the design rather than vice versa. The use of the experimental method would, then, conflict with the fundamental principle that evaluation should lead to the continual improvement and modification of a Teacher Corps project. Project staff cannot be expected to limit their demonstration efforts and activities to accommodate the constraints of a research design, just to guarantee internally valid data. As project staff members learn about the strengths and weaknesses of their project activities, they may have to change, and sometimes radically alter the project in order to meet the needs of the project's constituencies and clients.

A second major weakness of the experimental method as an evaluation tool, is that it yields data about the effectiveness of a project after the fact. Therefore, while it is useful as a summative device, it has little value as a decision making tool. After the fact data are not provided at appropriate times to enable project staff to determine what their project should be accomplishing, or whether it should be altered. Often by the time experimental data have come in, it is too late to make decisions about plans and procedures which may determine the difference between the success and the failure of a program.

Finally, the experimental method is typically used to study discrete elements of an educational problem and, therefore, often yields isolated factors associated with specified outcomes which have doubtful application to the complexities, convolutions, and changing contexts of varied school and classroom situations. It is unrealistic to assume that any experiment can actually control all pertinent factors save the independent variable. The pertinent factors in children, parents, teachers, classrooms, curricula, communities, homes, and in the interaction of all these variables with each other and with other causal factors are not understood. The fact is, in real life, people do not get assigned to each other, to problems, and to time and place with rigorous experimental randomness and neat designs. To shed light on the real life of the classroom, of the school, of teaching and learning, researchers must either study real life or simulate in the laboratory <u>all</u> the conditions in real life that might possibly be important in determining cause and effect (Goldman, 1979, 42).

Theecology of teaching, the ecology of implementing educational innovations, and the ecology of initiating change require an emphasis on hypothesis generating and qualitative methodologies. An awareness of the multidimensionality of teaching and learning, of curriculum development, and of educational change, compellingly argues for a search of methodologies that facilitate the study of the many dimensions, variables, and meanings that appear simultaneously in the class-

room (Tickunoff, Ward, and Griffin, 1979). Tickunoff (1977, 2) observes that "what we call classroom teaching and learning is embedded in a complex myriad of interdependent variables, all of them situationally specific" and Kennedy (1977) refers to "the complex array of human/environmental behavior and variables which influence classroom events, phenomena, and processes." An adequate understanding of the meaning and significance of profile differences for classroom behavior and learning can only be provided through information about the contexts of behavior: the subject matter taught, the physical setting of the classroom, the persona of the teacher, and student opinions and interpretations of behavior (Delamont, 1976, 7). Goodlad (1977) makes a similar point relative to the school curriculum and Carini (1975) argues that in order to understand the phenomena of education perceived reality, particularly participants' views of educational situations, are essential.

Educators need to emancipate themselves from the straight jacket of experimental design and recognize that good research can be conducted in many different ways. Good research requires common sense. With some training in documentation, participatory/observational techniques, case study approaches, the use of audio/video taping systems, personal journals, record keeping, teachers in partnership with university faculty can bring about a renaissance of school based research which characterized the progressive era in education and contributed valuable ideas and practices for the education of children.

Conducting research without the full cooperation and collaboration of the person responsible for maintaining classroom life -- namely the teacher -- is impossible. Teacher and student interpretations of the meanings of events must be obtained. Natural classroom settings must be maintained even though a vast array of variables is studied. Alternative approaches to educational research must reflect collaborative relationships among teachers and researchers, if research outcomes are to be perceived as relevant and useful by practitioners and improvements in education are actually to occur (Clark, 1976; Elliott, 1977; Krathwohl, 1974; McLaughlin and Marsh, 1978; and Tickunoff, Ward, and Griffin, 1979). Such working relationships are epitomized in collaborative action research.

COLLABORATIVE ACTION RESEARCH

Collaborative action research is characterized by several elements:

1. Research problems are mutually defined by practitioners and researchers.
2. University faculty and classroom teacher collaborate in seeking solutions to practitioner's problems.
3. Research findings are used and modified in solving problems.
4. Practitioners develop research competencies, skills, and knowledge, and researchers reeducate themselves in field based and naturalistic research methodologies.

5. Practitioners as a result of participating in the adaptation process are more able to solve their own problems and renew themselves professionally.
6. Practitioners and researchers co-author research reports.

Collaborative action research liberates teachers' creative potential, stimulates their abilities to investigate their situations, and mobilizes human resources to solve educational problems. As a collaborative process action research begins when researchers, university faculty, and teachers assist each other in developing the skills to identify and conceptualize problems.

> Collaborative action research is a process in which teachers and researchers work with parity and assume equal responsibility to identify, inquire into, and resolve the problems of classroom teachers. Such collaboration recognizes and utilizes the unique insights and skills provided by each participant while, at the same time, demanding that no set of capabilities is assigned a superior status. It assumes a work with rather than a work on posture -- the latter being more frequently the modus operandi when teachers are asked to join researchers in a linear r and d endeavor (Tickunoff, Ward, and Griffin, 1979, 10).

The work on posture, which has characterized traditional experimental research, can be described as a technological process responsive to the catalytic action of educational researchers who keep the locus of decisions outside the school and away from teachers. This approach prevents teachers and the school from becoming the subject of their own transformation. Freire (1973) insists that methodological failings can always be traced to ideological errors. There is an implicit ideology of paternalism, social control, and non-reciprocity

between experts and "helpees" which underlies traditional experimental research. (In the traditional research study one finds "subjects" interesting language which suggests that someone must be the "ruler" or the manipulator.) If one is to adopt the collaborative action research model which fosters dialogue and reciprocity, one must first be ideologically committed to equality, to the abolition of privilege, and to non-elitist forms of research leadership wherein special qualifications may be exercised but are not perpetuated.

Collaborative action research focuses on the involvement of those who are traditionally "researched" in the identification of problems, the formulation and collection of data, the interpretation of information, and the application of findings to solving problems. Collaborative action research answers the question of who has the right to create knowledge by arguing that the expected beneficiaries of research should design and carry out their own research. There are three assumptions underlying this approach: 1) parity in decision-making among researchers, trainers/developers, and practitioners; 2) respect for the unique perspective of each constituency; and 3) equal assumption of responsibility among each participant in the collaborative research and theory development process (Margendoller, 1979).

A collaborative research process can be of immediate and direct benefit to a school and its constituents. It is important that the school and the community gain not only from the results of research, but from the process itself. This means, for example, that teachers,

students, and members of the community -- as a result of participating in the research process will be able to articulate problems themselves and to initiate processes to find solutions. The funamental principle of collaborative participatory research and its point of most radical departure from orthodox research is that the research process is based on a system of discussion, investigation, and analysis in which the researched are as much a part of the process as the researcher. Theories are neither developed beforehand to be tested, nor drawn by the researcher from his or her involvement with reality. Reality is described by the process through which a school, a community, and its teachers, parents, and children develop their own theories and solutions about themselves and their situations (Hall, 1977).

The tradition of the research establishment is hard to change. Too easily, teachers become consultants to rather than full participants in the research process. Too easily, the researcher becomes the sole originator of the research while the practitioner becomes simply the object of study rather than an investigator as well. If teachers are to be full partners in research, they must be coinvestigators who share with researchers the responsibility for the design and execution of the research and for the interpretation and dissemination of the results (Gajewski, 1978).

Teachers participating in collaborative action research become agents of their own change. Teachers can use action research to grow personally and professionally, developing skills and competencies which empower them to solve problems and improve educational practice. This can

be done without formal staff development activities. Moreover, not only do teachers identify practical theories that apply to their own idiosyncratic settings but they are also able to formulate these practical theories as general hypotheses which have the potential for universal applicability.

Action research yields its own findings regarding the effectiveness of different research based strategies in different situations with different pools of available resources, and for different kinds of content. As Massanari (1978) suggests, "such findings should be collected, synthesized, and disseminated to the education community. They would be valuable and needed contributions to the knowledge base that supports education personnel development. Publications such as 'What's Working Where' and 'What Didn't Work Here' would be welcomed by the education profession."

Collaborative action research requires the coordination of the publication and research interests of university faculty, the thesis research of graduate students, the term paper requirements of graduate and undergraduate students, with the problem solving and inservice training needs of teachers. Collaborative action research offers the opportunity for intensive involvement between researcher and practitioner; it offers mutual sharing and stimulation of curriculum development, teaching, and measurement problems and the sense of participating in intellectually coordinated research on "large" educational problems

(at least as contrasted to the more typical thesis and term paper topic). Most important, collaborative action research is substantial professional inquiry and scholarship in its scope, its epistemology, and its outcome. A practitioner with this orientation and skill in action research is no longer static or dependent on others for professional progress. The practitioner's own professional growth and competence is enhanced. Not only are practitioners likely to feel professionally alive, they may also feel effective -- in that they can do something about their profession. If action research meets these goals then we are really describing a generic process of inquiry and growth for the education profession (Mosher, 1974, 87).

University faculty, graduate students, and teachers can be trained in the collaborative process so they can produce knowledge from practice. The intellectual and professional process of producing new knowledge about problems in teaching, curriculum, and school change is the raison d'etre of action research. The issue here is that of tension between means (curriculum development or educational change) and an end, i.e., knowledge from and for practice and the training of people able to inquire professionally in this way about a wide range of issues in education. Producing knowledge from practice results from an alternating cycle of reflection and action, hard thinking, careful practice and evaluation designed to generate a more comprehensive understanding of educational problems and their possible solutions (Mosher, 1974).

Collaborative action research is service, a process of concurrently inquiring about problems in education and acting on them. It assumes that educational practice is the first business of education, that there is a generic need to improve educational practice, and that the improvement of educational practice requires the confrontation of real problems in the school by conceiving alternatives and testing them out. Practice then becomes the crucible for innovation, an obtrusive measure of assumptions, speculations, and theories.

There is great promise in the pursuit of practical inquiry with the collaboration and mutual support of researchers and practitioners who together contribute to the solution of classroom problems and to the improvement of educational practice. The idea of such collaborative efforts was articulated by Schaefer (1967) in his book, The School as a Center of Inquiry, and demonstrated in the 1940s by Stephen Corey and others at Teachers College, Columbia University in action research projects which brought together teachers and professors primarily for curriculum development purposes.

Teacher oriented inquiry and the view of the school and the classroom as the proper focus of research action will come about when researchers and teachers change their attitudes and perceptions about inquiry and research. McKenna (1978, 2) speaks clearly to this point:

> . . . many researchers will have to revise their posture that scholars mustn't get their hands dirty with the clay; that the potting must be done by others, once the scholars have pre-

> scribed the clay mix and kiln temperature. More specifically, the attitude that you can't learn much in the 'messy' situation of the ordinary classroom will need to be replaced with one that accepts real schools as the most appropriate places for conducting research and development. And researchers will need to come to recognize teachers as peers, as colleagues, who have much to contribute to improving the R&D process, from identifying researchable issues, determining research design, data gathering and analysis, to planning programs based on findings. Once these are accomplished, new strategies for conducting research may need to be devised and tested in order to inquire into the multidimensional problems that are identified for study.
>
> Teachers on their part will need to reconceptualize their roles to include involvement in inquiry and problem solving on instructional issues. And they will need to gain confidence in their ability to contribute on a parity basis to the research and development process.

The integration of research and service through collaborative action research can help our schools become centers of inquiry where university faculty and professional teachers inquire systematically on such fundamental issues of what is to be taught, how, by whom, where and with what outcomes for students. The process of systematic inquiry constitutes effective and meaningful professional development. Significant learning and growth occur when teachers and university researchers work together in carrying out research to solve problems that concern themselves and the schools.

The school is the best laboratory for research. In one school building there probably are more real researchable problems deserving the support and attention of funding agencies than one would imagine. Jackson (1968) says that the classroom teacher typically engages in as many as 1,000 interpersonal exchanges during the course of a six-hour

day, frequently averaging 200-300 interpersonal transactions per hour. This observation in itself testifies to the complexity and immediacy of the daily situation in which every teacher is forced to make decisions. A single school is a research goldmine in terms of important questions, variety and richness of data, and numbers of potential researchers. Educational research must be fashioned from the fabric of the questions and problems of the school. The practical orientation of the school provides a research perspective that fits the unique and rich character of educational problems. The dominant chord of school and classroom oriented research supplants the ethos of knowledge for the sake of knowledge, with inquiry that generates usuable knowledge which spawns decision and action.

Paradoxically, it is the knowledge generated from practice that will enrich our conceptual understandings and educational theory. The action, reflection, teaching, evaluation cycle feeds on itself epistemologically. Collaborative action research adds to both conceptualizing and practice by validating one against the other (Mosher, 1974). "To suggest that theoretical and practical research can be conceived as thesis and antithesis enables the possibility of synthesis. It runs the risk, admittedly, of oversimplification; but surely there must be hope for productive combinations of practical and theoretic orientations" (Schubert, 1980, 23).

THE TOOLS OF COLLABORATIVE ACTION RESEARCH

Documentation

The fundamental tool of collaborative action research is documentation. Documentation is a way of monitoring, observing, and defining what takes place in ongoing processes, (Ianni, 1978). It subsumes an entire gamut of activities concerned with information (Mertens and Yarger, 1979). These include:

Collecting information
Generating information
Organizing information
Synthesizing information
Analyzing information
Explaining information
Using information
Disseminating information

The purpose of documentation is to develop an ongoing record, an ongoing process, and finally a continuous form of assessment for programs. Documentation is the sine qua non for evaluation and action research. The only adequate way of describing what takes place in any social or behavioral situation, is to be there, to be a participant, to observe continuously and to become intellectually and emotionally involved in what takes place. Action research requires that a field perspective be taken rather than a laboratory perspective. Educational research is traditionally a process by which pre-existing ideas are vindicated or validated. It is imperative in action research that teachers and university faculty researchers, even though objective,

should be involved in the process and milieu of the classroom and give feedback which allows individuals to change their programs -- and even to change their objectives, when appropriate and possible. There is no lack of scientific rigor in such a position. Documentors can take a field-oriented approach; they can spend a great deal of time observing and still make objective value judgments. The field-oriented approach requires training and careful analytic work, but it can be done (Ianni, 1978).

An analytical process which is essential to documentation is adequate observation, and, far more important than the observation itself, the recording of those observations continuously -- and immediately after the observation has been made. Documentors need to record their own impressions immediately after an event, in addition to using tape recorders during the observation.

Another important documentation approach is the use of questionnaires, surveys, and other devices aimed at recording perceptions, ideas, questions, concerns, and trepidations -- everything that takes place in a program -- from as many teachers, students, and staff members as possible. Documentation is a laborious process and ought to be a shared and collective responsibility. There is simply no way in which one can describe documentation as anything but a great deal of work but work which has an important payoff at the end.

Documentation helps to establish the best strategies for action research and program development when it is used to develop a series of case histories or clinical studies to look at the same processes in education in a number of different settings. One of the great recurring problems in educational efforts is the tendency for programs and projects not to inform or reinforce each other. Consequently, each project, each new program, tends to begin as if nothing had ever occurred before. As a result, it is impossible to make any kind of judgment based upon more than one case.

Documentation is for making value judgments. There is no way to avoid it. What documentation does, however, is to allow educators and other professionals to underwrite and to validate what is taking place in a particular program. Values are of tremendous importance. Documentation should not be viewed as simply a matter of collecting and keeping sterile quantitative records. The qualitative issues -- the values that are inherent in a program -- can only be described through adequate documentation (Ianni, 1978).

Documentation can be regarded as a phenomenological tool for it records perceived reality as well as objective reality, it records feelings and personal experiencing and through documentation we can describe and interpret teachers' and students' intentionality, probe the realms of their lived experience, and explore the boundaries of their awareness that form their horizons in the classroom and in the school. Documenting feelings, personal experiencing, and perceptions

helps to define action research as phenomenological research -- research which captures the pulse, the vitality, and the fibrous nature of life in the classroom.

Retrospection

One of the ways in which documentation can be used to explore the phenomenia of the classroom and the school is through retrospective studies of curriculum development. In classroom situations, one finds five commonplaces (Schwab, 1975); teachers, students, subject matter, curriculum decisions or policy, and milieu or psychosocial and material environment. The interactive impact of these forces, in fact, constitutes the curriculum. Curriculum, used in this way, is the central focus of educational research (Schubert, 1980). Wise (1977) argues that if developing good curricula is a central concern than personal accounts of such attempts should be emphasized in professional discussions, and a literature of accounts of curriculum practice is necessary for training new curriculum specialists. Retrospection is, therefore, a legitimate form of inquiry into curriculum development practice. Productive forms of personal inquiry into curriculum development include case studies (Walker, 1975), historical study through documentation analysis (AIRPD, 1971), and retrospective accounts (Wisner, 1975; Purves, 1975; Regan, 1971; Wooton, 1965). As a form of inquiry retrospection is unique including both introspection and observation as sources of data.

Retrospective accounts of curriculum development offer "our most precious source of knowledge about our field -- our own experience" (Wise, 1977). Such accounts recognize curriculum development as a personal, human, particular, and often episodic process. It is the human particulars of curriculum development which make practice what it is, and it is those particulars with which the field is out of touch (Wise, 1977; Kaplan, 1964; Schwab, 1970).

Retrospective studies grasp the contexts, nuances, personal realities, and situational specifics of what happens when a teacher tries to implement new ideas and approaches. As personal accounts they describe logic as demonstrated in classrooms, as opposed to reconstructed logic -- the manner in which personal experiences are presented as knowledge (Kaplan, 1964). Curriculum theorists (Wise, 1977; Schwab, 1970; Walker, 1975; Fox, 1971; Eisner, 1975) indicate that the major problem of curriculum theory is that personal experiences have been reconstructed into a knowledge which does not reflect actual practice. The aim of retrospective accounts is to capture the practical sense and concrete reality of the classroom world, and to share these with colleagues. Summarizing the case for retrospective studies as a form of action research, Wise (1977, 14) observes that:

> Our literature about curriculum development does not now indicate much in the way of accumulated practical sense. We do not have a rich store of studied and catalogued accounts of curriculum development practice in which what happened and how well it happened are presented. We do not recount for others the problems we faced in development, the problems solved, the solutions discovered, the

> solutions failed. We do not recapture and report strategies of thinking that have led us to good decisions. We do not distill from our experience what manners of imagination, judgment, arguments or brainstorming helped or hindered our work. We ought to be reflecting on our experiences in curriculum development, recounting them to ourselves, analyzing them, and presenting their accounts to our colleagues in a form that helps them to understand the significance of the experience, the lessons of the experience.

The Case Study

The history of the social sciences is filled with dramatic conceptual "breakthroughs" which have emanated from the use of the case study. The ideas of Freud, Piaget, Maslow, Erickson, Jung, Adler, and Rogers are examples of profound influential ideas which were born and nurtured through the case study approach. The case study is a congenial approach for the person of action, for the person who engages life, who tries out ideas, reflects on their implementation, and tries again. The cycle of thought-action-thought finds comfortable embrace in the case study, a basic methodology for action research.

The case study is the traditional approach of all clinical research and lends itself extremely well to action research. It is the preferred method of the practitioner who is concerned with complex interrelationships among many variables and whose subject matter (i.e., the clinical situation involving human beings) makes experimental manipulation difficult and often impossible (Bolgar, 1965).

When an inquirer approaches a new area in which relatively little is known, the case study is the first methodological choice (Bolgar,

1965). The true power of the case study lies in its ability to generate hypotheses and discoveries, its focus on the individual or an event, its flexibility, and its applicability to natural settings. The procedural requirements for a case study lend themselves to the solution of problems relevant to teacher-student interactions. Case studies can assist in the identification of educationally relevant variables, and the conditions under which they are effective. Case studies are intended for natural settings and contain data collection procedures that can assist teachers in their decision making. The collection of data and the procedures required for case studies are compatible with instructional purposes. The inherently flexible nature of the case study approach, the search to identify sources of variability, and the requirements for data based feedback for decision making are all components necessary for the improvement of teaching and the design of situation specific programs.

The great strength of the case study approach is its ability to describe in a holistic way the program "treatment" and its effects on students; it does not simply focus on narrowly defined outcome variables, but instead it includes much descriptive information. The case study synthesizes vast amounts of information about individuals and about the instructional program and presents it in a form that can be interesting and easily understood. Information sources including background data, test scores, affective measures, self reports, peer reports, staff reports, parent observations, student products, anecdotal data, and

evaluator observations, are considered essential for the case study. Of special importance is the development of chronological case histories in which data are collected at different points in time. The integration and cross validation of this information adds strength to the final case study report.

Direct contact and extended observation of the students themselves are often necessary to reach conclusions related to variables involving the academic and affective behaviors of children. Through the case study one can not only examine pre and post test data, but also the intervening events, forces, and activities affecting the life of each student, and the interventions which do or do not influence cognitive and affective changes. Studies of this kind are needed to investigate the developmental histories of different student populations targeted by Teacher Corps and other innovative programs in relation to a particular project's objectives.

In a profession where there is a basic commitment to the teaching and understanding of individual students, it is ironic that research devoted to the full study of individuals is so rare. The full study of individuals enables teachers and university faculty to function as clinical researchers. This is an excellent way to examine the wide range of contextual and multidimensioned variables which impinge on student development, and provides a sound action research base for generating new hypotheses about student learning and growth. The case study is a powerful research methodology for sparking interplay between thought and

action, helping to develop increased capacities of analysis which make educational change actions possible.

THE CONDITIONS FOR COLLABORATIVE ACTION RESEARCH

Climate

In establishing a foundation for collaborative action research, modest beginnings are no disgrace, and are in most respects preferable. The visibility and impact of early efforts may be small, but it is advisable to consider carefully the relative merits of simple versus more intricate research plans and data analysis procedures. It is likely that by adopting the strategies of a methodological miser, there is more to be gained than lost. In the conduct of action research, just as in the interpretation of its results, the law of parsimony is recommended (Siebert, 1980). Modest beginnings can serve to build, step-by-step, an action research tradition of dealing with real problems that already have a natural and interested audience.

By selecting and pursuing questions which focus on the immediate and imperative problems of the classroom and the school, collaborative action research can attract the greatest attention at the most opportune time (when there is something substantial to report), for the best reason (because some progress has been made, either in terms of increased understanding or solutions to problems) and probably from the right audience (those who have a pre-existing interest in the problem and its solution).

(3) Technical assistance and support and consulting services ought to be provided when necessary to help teachers (and university faculty) learn field-based research processes.

(4) Reasonable material support for carrying out research should be available.

(5) University credit, staff development credit, or inservice credit should be given to teachers for conducting research if they desire it.

Requirements of Teachers

Teachers must be willing to have other adults in the classroom and to see this as a positive factor not interfering with teaching and learning. It is helpful if participating teachers have abilities to describe and analyze aspects of not only their students behavior but also their own behavior. Teachers who have not thought about classroom teaching and learning in such rational ways may need time to explore these aspects of their classrooms prior to entering the collaborative action research process. Teachers need to consider how to restructure their time since action research may require time away from the classroom. Teachers need documentation and observation skills; they need to be familiar with data collection strategies so they can participate in such decisions; they need to feel comfortable with analyzing and interpreting data, drawing conclusions, and writing actions of the study.

Requirements of University Faculty

University faculty members of the action research team may also need to be reeducated to learn to recognize and exploit the naturalistic dimensions of school-based action research. Gaining access to what teachers know about the classroom requires that university researchers have interpretive skill, patience, and the ability to ask the right questions in the right manner. The researcher gains such access through professional relationships that are based on privileged conditions (Emery and Trist, 1973). Teachers' willingness to share ideas, open up their classrooms, critique and try out research strategies, and discuss and interpret findings with the researcher are vital to action research., The researcher wins these conditions by honoring, respecting, and responding to the knowledge and skills of other action research team members and proving his or her competence in providing some kind of unique service to the team. The university researcher must be an unusual person -- one who is acceptable and comfortable in public schools, one who possesses interpersonal and group process skills, and a knowledge of research, and one who has the ability to capitalize upon unanticipated events, serendipitous opportunities, and unsettling insights (Tickunoff, Ward, and Griffin, 1979).

Collaborative Process

It is imperative that all members of the action research team be brought together initially to learn how to collaborate. This is seldom

done. We gratuitously assume collaboration will happen if we bring people together as members of a task force or committee. It is essential to have people focus in right away on what collaboration is and what it demands. Teachers and university faculty need to be taught how to collaborate and deal with significant questions about the process. What is collaboration? What does it involve? What does it cost? What are its risks? What are its benefits? Am I ready to pay the costs and give up something to get the benefits which accrue from collaboration? How do we help each other in the process? What are the ground rules for making decisions? Collaboration is a dialectical and dialogical process with a lot of give and take and its use in action research requires that university faculty and classroom teachers build trust, communicate and solve problems together from the beginning. Action researchers need to prepare themselves for dealing with the conflicts which naturally emanate from the interface of the different norms, behavioral regularities, and values of the university and the school. Collaboration is not achieved naturally. It is a sophisticated process which must be taught and learned deliberately.

Attitudinal Change

Collaborative action research possibilities in field-based teacher education are endless. University faculty need to recognize that their personal, vested interests can be served by their active participation in field-based staff development as an effective entré into field-based

research. The irony of the situation is that often university faculty who ostensibly have been trained to conduct research do not know how to carry out field-based research; they cannot do what they ought to do. Rather than viewing on-site teaching and consultation as inconsistent with career development, faculty need to see there is much to gain personally from working with schools and communities in researching the problems created by declining enrollments, in researching the staff development process, in researching the problems of accountability, collaboration, mainstreaming, and teacher burnout. The opportunities for research in the field, particularly in relation to staff development, are limited only by the imagination. First it may be necessary to provide staff development for the staff developers, so that university faculty can do what is often claimed they do better than anyone else -- conduct research. A Dean in a state university offers this advice to faculty:

> Long term systematic approaches to inservice education offer university faculty and classroom teachers the time and place to exploit natural problem situations for action research. Begin with problems confronting teachers in the classroom and help them to become researchers to solve their own problems. Work with them, formulate hypotheses, test them out in the classroom, and write them up. Everyone should publish. Create your own in-house journal -- mimeograph papers -- circulate them among faculty colleagues, teachers, and parents in the community. Function as teams of inquirers and problem solvers. Bring inservice and preservice teachers and university faculty together as research teams. Encourage them to investigate problems regarding individualization, class size, mainstreaming, classroom management, school climate, reading, creativity. Isn't it absurd that concurrently in one university teacher education program preservice students will be writing term papers, inservice teachers will be writing term papers or preparing projects

for a graduate course or workshop, and some university faculty will be writing manuscripts -- all in anonymous isolation from each other. What excitement there would be and what quality action research would result if we could assemble these people, create action research teams, identify real problems, and have these teams do some real blood and guts problem solving. We would break down the fragmented approach to teacher education, integrate preservice and inservice education, and produce usable knowledge. This is the best kind of staff development.

Collaborative Action Research: A Proposal

By clustering graduate teacher interns, undergraduate students, graduate students in, for example, administration, counseling, reading, and early childhood, and university supervisors in selected school sites local districts would have a critical mass of resources to work with in creating staff development and action research programs by redirecting existing resources, consolidating resources, and discovering mutually benefiting resources.

For the sake of an example, imagine a university and a local school district entering a partnership to establish a teacher center. The university and the school district are able to work out arrangements so that the following kinds of university students can be placed in the school district:

1 or 2 post master's degree students in educational administration and supervision
2 master's degree students in administration
3 master's degree students in counseling
3 master's degree students in reading
An early childhood team of two master's degree students who could staff an early childhood learning center (full year)

AND

10 master's degree teaching interns (full year)

IN ADDITION

15-20 undergraduate degree students who were exploring teaching and
1 or 2 university faculty assigned as on-site supervisors with
additional faculty coming in to supervise students

A school district would then have approximately 35-40 people available as additional resources.

There are endless possibilities with this kind of critical mass available to serve the interests and needs of all parties concerned.

After two or three months of the internship, teaching interns could begin to substitute for some classroom teachers so that regular staff could begin to have one or two days a week of time to:

1) plan and develop curriculum materials
2) visit and observe teachers in other classes. Teachers could become interns again - interning with each other
3) revise curriculum
4) participate in workshops or take courses
5) participate in conferences and case studies of individual students
6) design and plan approaches to individualize instruction
7) meet with colleagues in a relaxed atmosphere to share ideas
8) assume responsibilities for staff development activities

Interns could release a cadre of experienced, knowledgeable, and extremely competent teachers to help supervise and assist the less knowledgeable, the less experienced, and the less able members of a teaching staff. (Teachers teaching teachers.) This could prove to be one of the most effective means for addressing the problems of supervision.

Counseling and reading interns could provide support services for meeting the special emotional and intellectual needs of students.

Post master's administration interns could take on specific substantial administrative assignments and problems of the kind which would alleviate administrators of some burdens.

Master's degree students in administration could collect data and write up reports dealing with administrative matters.

Undergraduate students in the exploring teaching component of the university's teacher education program could provide tutorial help to children and offer individual attention to children who need it.

Through the cluster placement of interns, superintendents and principals would have additional resources which would enable them to gain flexibility in staffing and offer increased opportunities for differentiated staffing, individualization of instruction, and staff and curriculum development.

An on-site university supervisor could offer a course or a series of workshops for school staff. Working together school staff and interns could collect data for ongoing needs assessments, school census reports, and for the evaluation of programs. A library of instructional modules, reports, curriculum materials, assessment tools, and other resources could be developed.

Action research teams consisting of undergraduate students, interns, classroom teachers, and university faculty could be formed. These teams would identify specific problems to be researched. Decisions would be made and responsibilities assumed for literature searches, documentation, observation, evaluation, data interpretation, and implementation of alternative problem solutions. Results of the action research would be

written up, co-authored by teacher education students, teachers, and university faculty. A series of action research reports would be mimeographed and disseminated to teachers, students, and university faculty. Reports could be submitted to professional journals for publication.

The interests and needs of the university would be well served. Interns would have meaningful learning experiences to test and apply theory, to acquire and extend professional competencies, to learn and grow in the real world of education. University faculty would interface more frequently with practitioners on the front line of education and in the crucible of the real world of teaching, expand their perspectives on the teaching and learning process, and generate new hypotheses for research. The sites that would be available for the cluster assignments of interns would offer a wide range of experiences and would make university supervision more efficient.

Such centers would become more than teaching centers -- they would truly be centers of inquiry -- places where administrators, teachers, interns, and university faculty could share ideas and grow together through a sustained program of collaborative action research. What is required for the integration of research and service are imagination and will.

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